

## **ABSTRACT**

### **“CLINICO-SEROLOGICAL PREVALENCE OF SYPHILIS IN PATIENTS WITH HIV/AIDS”**

#### **INTRODUCTION**

Syphilis is a infectious disease caused by Spirochaete Treponema pallidum. The disease is transmitted mainly by sexual contact. Human Immunodeficiency Virus (HIV) can infect and progressively destroy helper “T” cells, killer ‘T’ cells and macrophages, thus altering the host immune response to other bacteria, virus and parasites. In this study, we made an effort to analyse various clinical presentations of syphilis and serological prevalence of syphilis in patients with HIV infection.

#### **MATERIALS AND METHODS**

Detailed clinical history including presenting complaints, sexual history, past history of Ano-genital disease and any treatment taken would be elicited. All the participants should undergo complete genital and physical examination.

In both male and patients presenting with genital ulcer, microscopic examination of smear from ulcers will be done with dark field microscopy, gram staining and leishman stains, Tzanck and Tissue smear. In case of genital discharge, in male patients – gram stain smear for gonococci, normal saline and potassium hydroxide wet mount would done. In females, endocervical swab for gonococcus

culture and endocervical smear for gram stain will be taken. Smears taken from vagina for gram staining, normal saline and potassium hydroxide wet mount will be done.

Routine Laboratory tests and serological investigations will be done for all participants. Screening test for syphilis will be done by VDRL and confirmed by Treponema pallidum hemagglutination assay (TPHA). ELISA for HIV-1 and 2 ANTIBODY ASSAY will be done after informed consent and providing pre and post test counseling.

## **RESULTS**

The prevalence of HIV positive among STD attendees during study period was estimated at 1.5%.

The prevalence of syphilis among HIV infected individuals was 16.8%.

The HIV and syphilis coinfecting individuals are asymptomatic in 35% of individuals and were identified during self screening. This explains the importance of STD screening.

The mean age of HIV and syphilis coinfection for males was 35.4 years against 33.8 years for females which represents sexually active age group (20 -40 years). Prevalence of HIV and syphilis coinfection was higher in graduates working in private company. Unusual and atypical clinical courses of syphilis were observed in HIV positive patients. VDRL titre were higher among HIV positive syphilitics.

Average CD4 count was lowest among HIV patients with secondary syphilis and these patients presented with extensive skin manifestations. .

Our present study revealed that Early syphilis was more prevalent among HIV positive patients, Primary stage (No- 3, 8%), Secondary stage (No- 14, 37%), Early latent Syphilis(N-11, 30%) and Late latent syphilis (No -9, 24%).

## **CONCLUSION**

To conclude, both HIV infection and syphilis being sexually transmitted diseases, their coinfection alters the natural course and clinical manifestation of each other. Hence high degree of clinical suspicion, appropriate timely investigation helps in early diagnosis and treatment of both diseases.